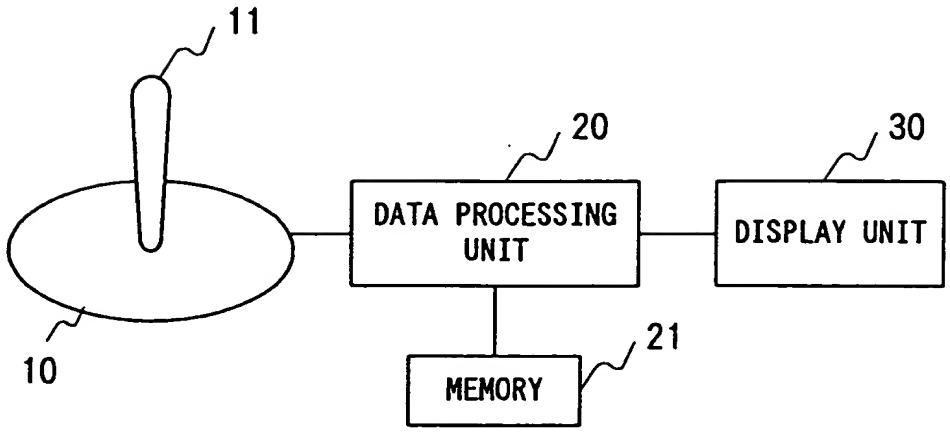
319372/1916

FIG.1

(a)



(b)

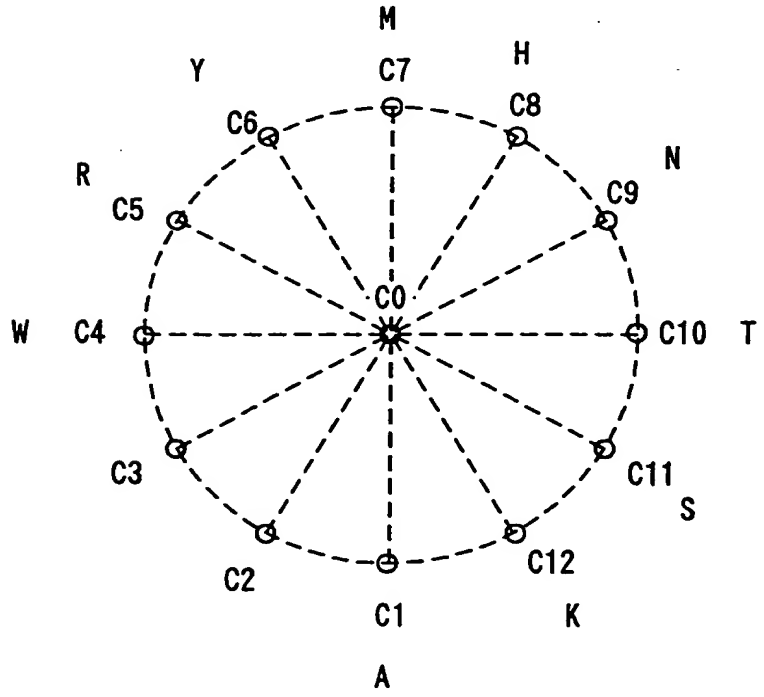


FIG.2

(a)

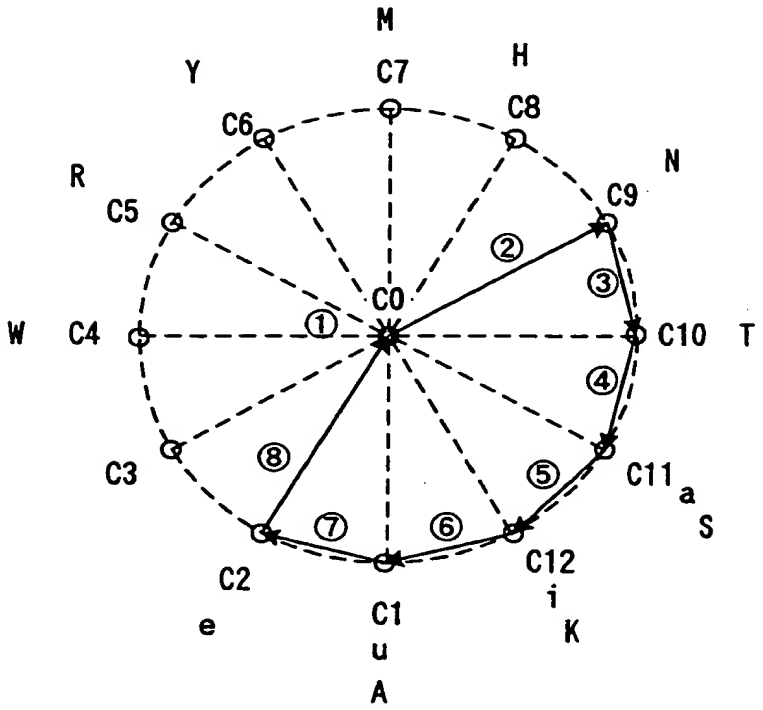
STATE	OUTPUT(BINARY)
C0	000000000000
C1	000000000001
C2	000000000010
C3	000000000100
C4	000000001000
C5	000000010000
C6	000000100000
C7	000001000000
C8	000010000000
C9	000100000000
C10	001000000000
C11	010000000000
C12	100000000000

(b)

STATE	OUTPUT (HEXADECIMAL)
C0	0h
C1	1h
C2	2h
C3	3h
C4	4h
C5	5h
C6	6h
C7	7h
C8	8h
C9	9h
C10	Ah
C11	Bh
C12	Ch

FIG.3

(a)


M
C7
H
C8
Y
C6
N
C9
R
C5
C0
W
C4
C10
T
C3
C11
a
S
C2
C12
i
e
C1
K
u
A

(b)

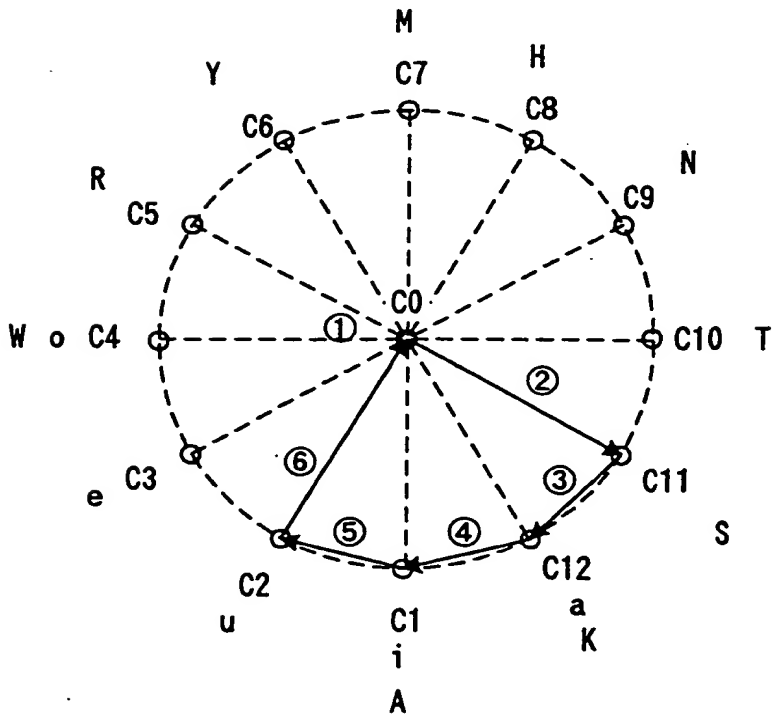

M
C7
H
C8
Y
C6
N
C9
R
C5
C0
W
o
C4
C10
T
e
C3
C11
S
C2
C12
a
u
C1
K
i
A

FIG.4 (a)

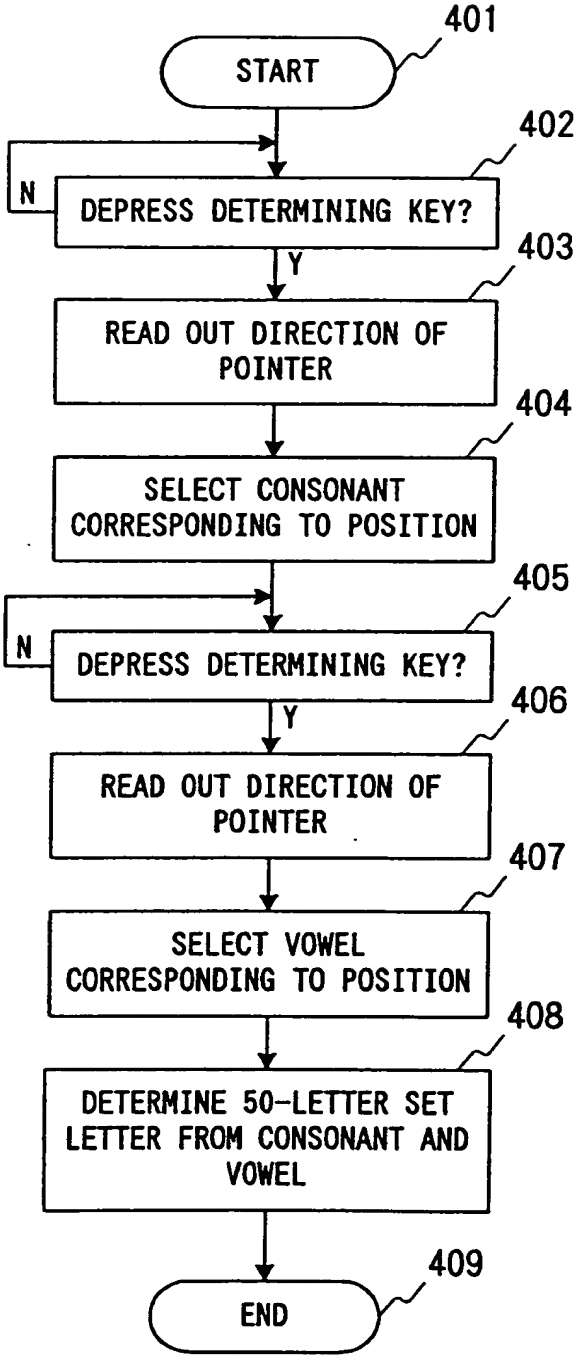

401
START
402
N
DEPRESS DETERMINING KEY?
Y
403
READ OUT DIRECTION OF POINTER
404
SELECT CONSONANT CORRESPONDING TO POSITION
405
N
DEPRESS DETERMINING KEY?
Y
406
READ OUT DIRECTION OF POINTER
407
SELECT VOWEL CORRESPONDING TO POSITION
408
DETERMINE 50-LETTER SET LETTER FROM CONSONANT AND VOWEL
409
END

FIG.4 (b)

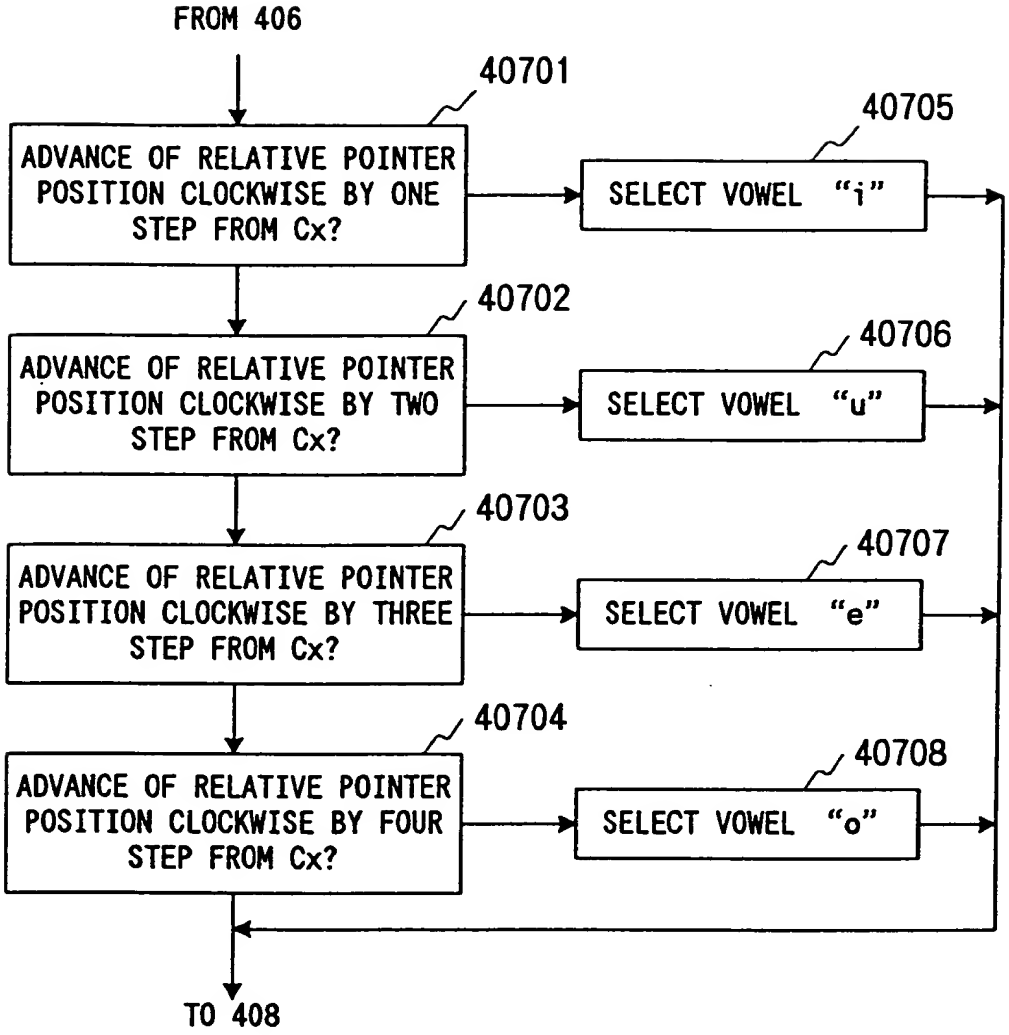

FROM 406
40701
ADVANCE OF RELATIVE POINTER POSITION CLOCKWISE BY ONE STEP FROM Cx?
40705
SELECT VOWEL "i"
40702
ADVANCE OF RELATIVE POINTER POSITION CLOCKWISE BY TWO STEP FROM Cx?
40706
SELECT VOWEL "u"
40703
ADVANCE OF RELATIVE POINTER POSITION CLOCKWISE BY THREE STEP FROM Cx?
40707
SELECT VOWEL "e"
40704
ADVANCE OF RELATIVE POINTER POSITION CLOCKWISE BY FOUR STEP FROM Cx?
40708
SELECT VOWEL "o"
TO 408

FIG.5

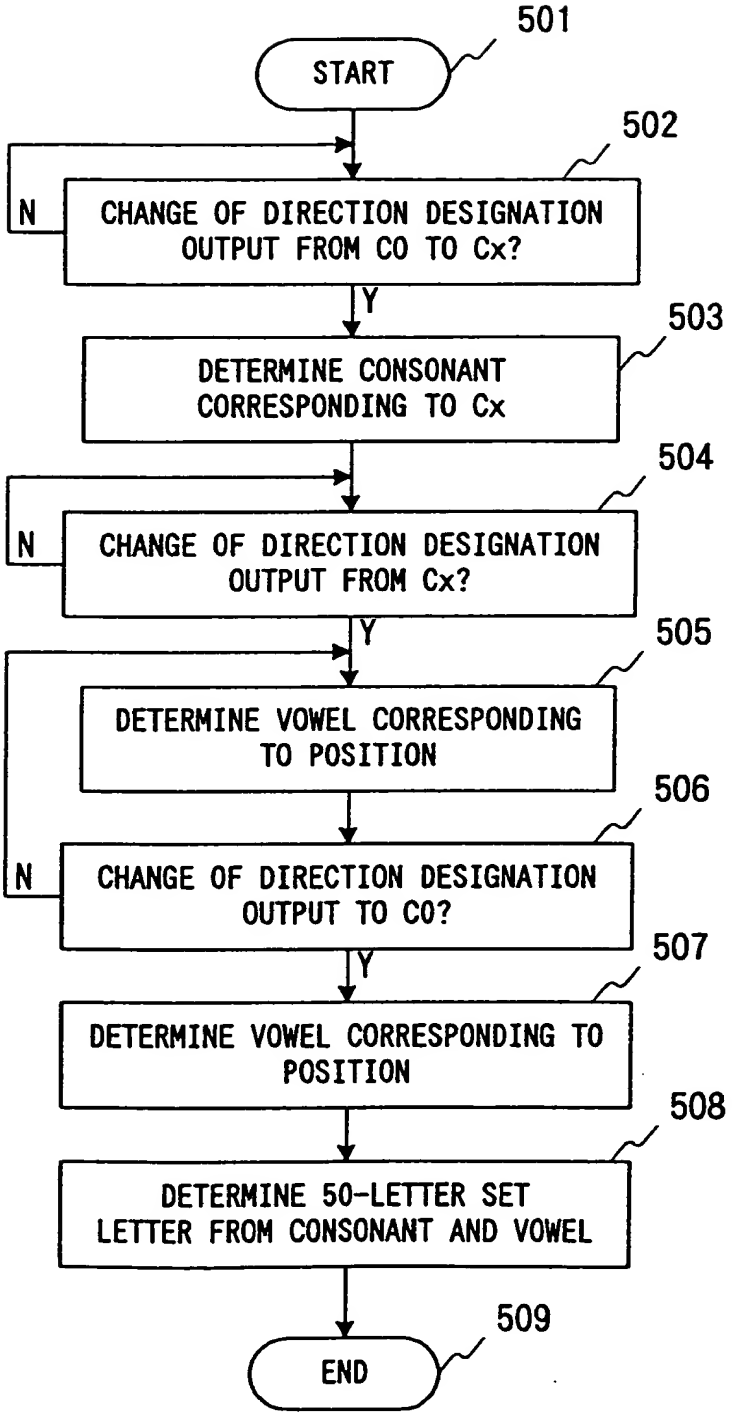

501
START
502
N
CHANGE OF DIRECTION DESIGNATION OUTPUT FROM CO TO Cx?
Y
503
DETERMINE CONSONANT CORRESPONDING TO Cx
504
N
CHANGE OF DIRECTION DESIGNATION OUTPUT FROM Cx?
Y
505
DETERMINE VOWEL CORRESPONDING TO POSITION
506
N
CHANGE OF DIRECTION DESIGNATION OUTPUT TO CO?
Y
507
DETERMINE VOWEL CORRESPONDING TO POSITION
508
DETERMINE 50-LETTER SET LETTER FROM CONSONANT AND VOWEL
509
END

FIG.6

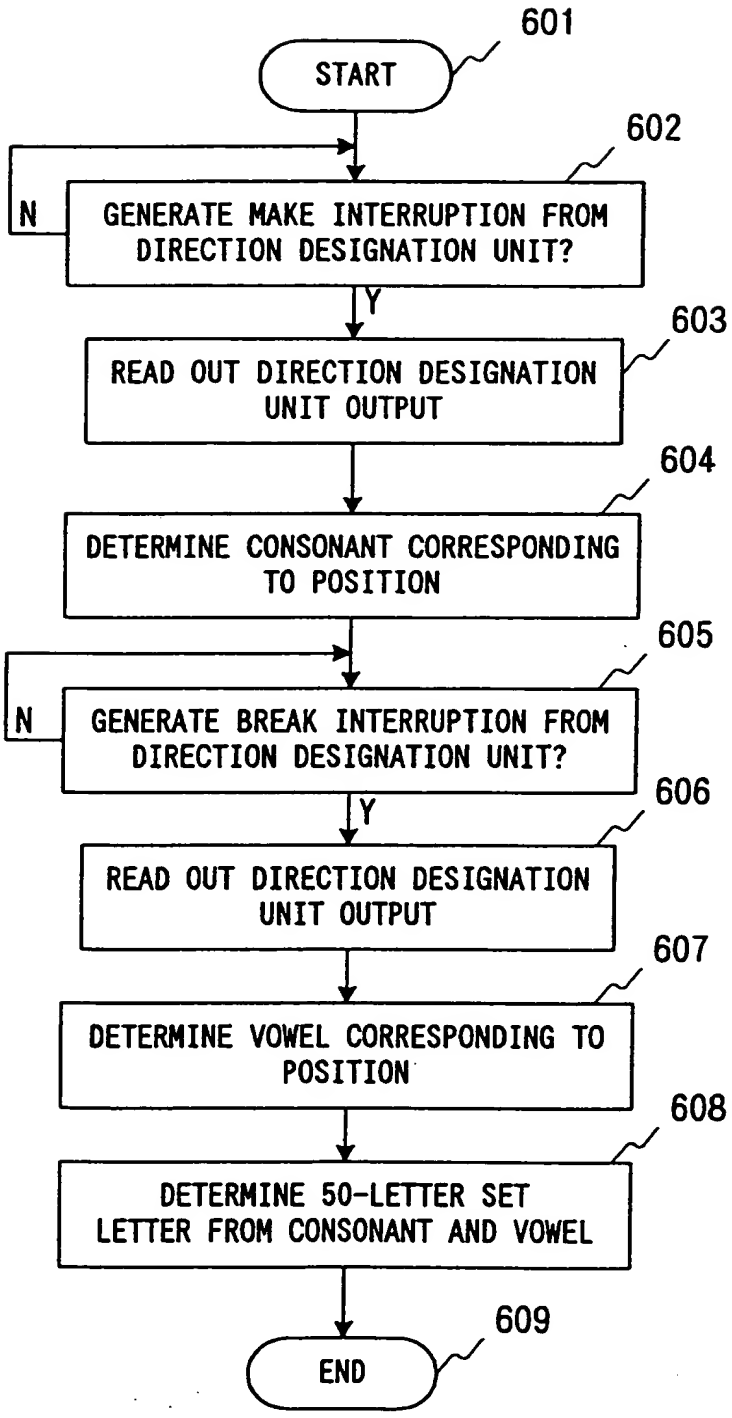

601
START
602
N
GENERATE MAKE INTERRUPTION FROM DIRECTION DESIGNATION UNIT?
Y
603
READ OUT DIRECTION DESIGNATION UNIT OUTPUT
604
DETERMINE CONSONANT CORRESPONDING TO POSITION
605
N
GENERATE BREAK INTERRUPTION FROM DIRECTION DESIGNATION UNIT?
Y
606
READ OUT DIRECTION DESIGNATION UNIT OUTPUT
607
DETERMINE VOWEL CORRESPONDING TO POSITION
608
DETERMINE 50-LETTER SET LETTER FROM CONSONANT AND VOWEL
609
END

FIG.7

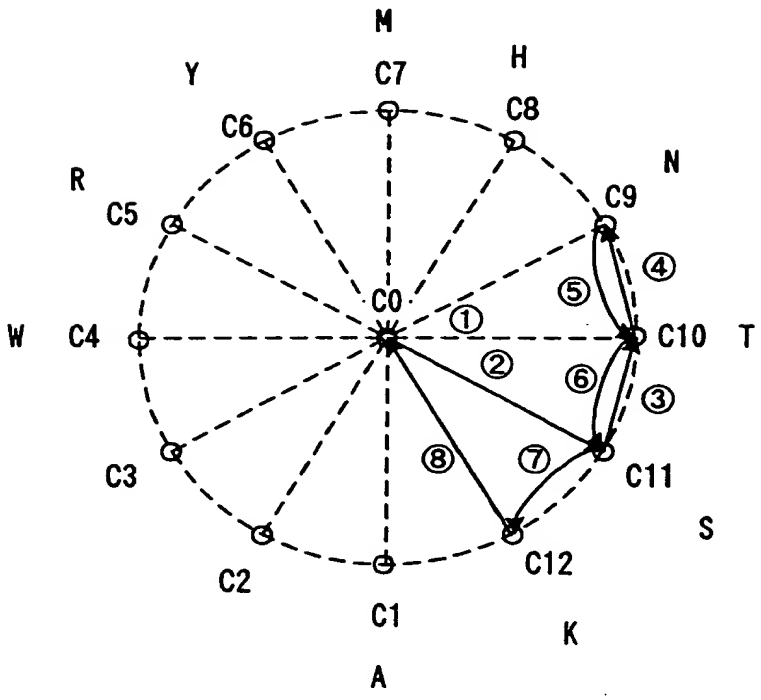


FIG.8 (a)

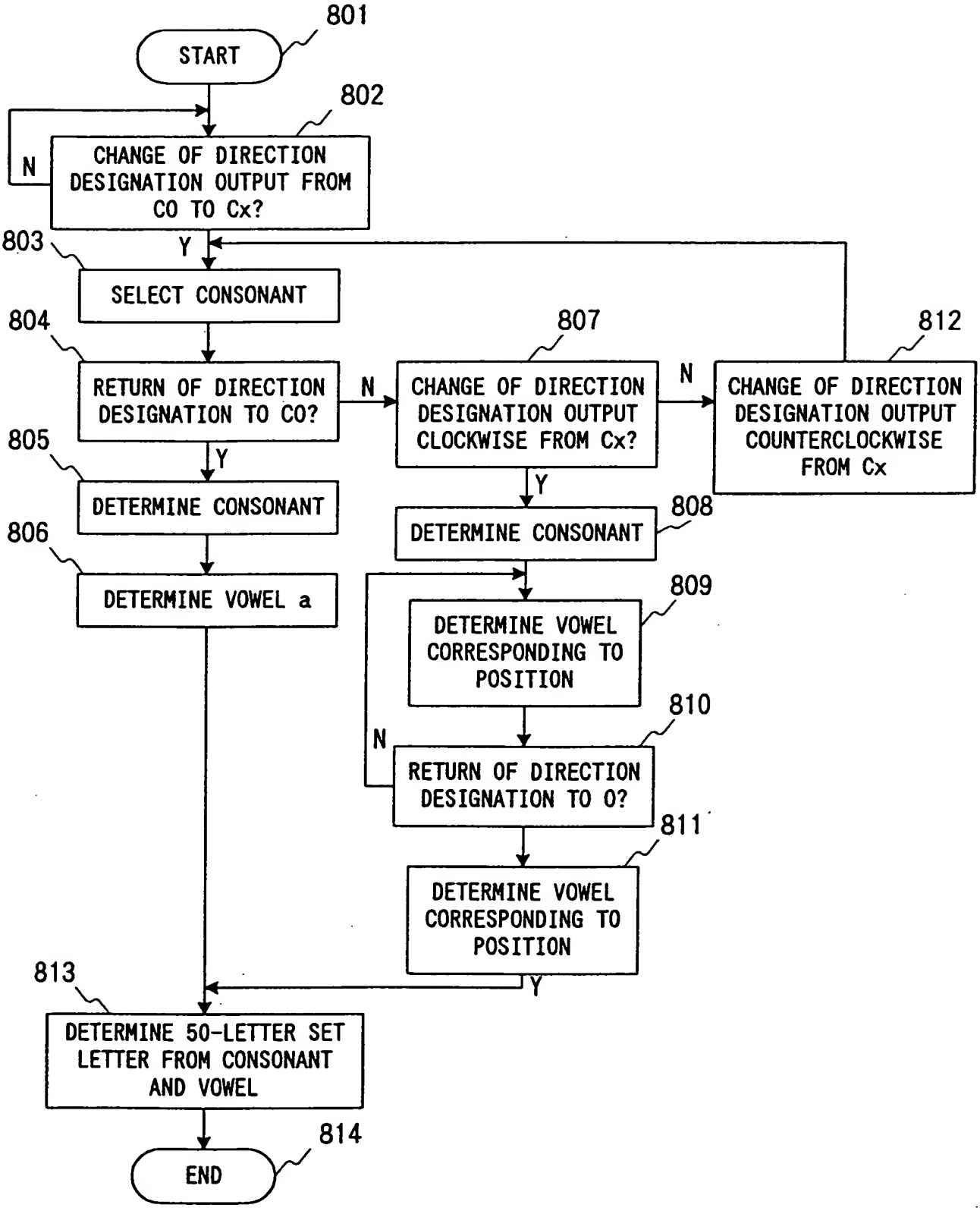

801
START
802
CHANGE OF DIRECTION DESIGNATION OUTPUT FROM CO TO Cx?
N
Y
803
SELECT CONSONANT
804
RETURN OF DIRECTION DESIGNATION TO CO?
N
Y
805
DETERMINE CONSONANT
806
DETERMINE VOWEL a
807
CHANGE OF DIRECTION DESIGNATION OUTPUT CLOCKWISE FROM Cx?
N
Y
808
DETERMINE CONSONANT
809
DETERMINE VOWEL CORRESPONDING TO POSITION
810
RETURN OF DIRECTION DESIGNATION TO O?
N
Y
811
DETERMINE VOWEL CORRESPONDING TO POSITION
812
CHANGE OF DIRECTION DESIGNATION OUTPUT COUNTERCLOCKWISE FROM Cx
813
DETERMINE 50-LETTER SET LETTER FROM CONSONANT AND VOWEL
814
END

FIG.8 (b)

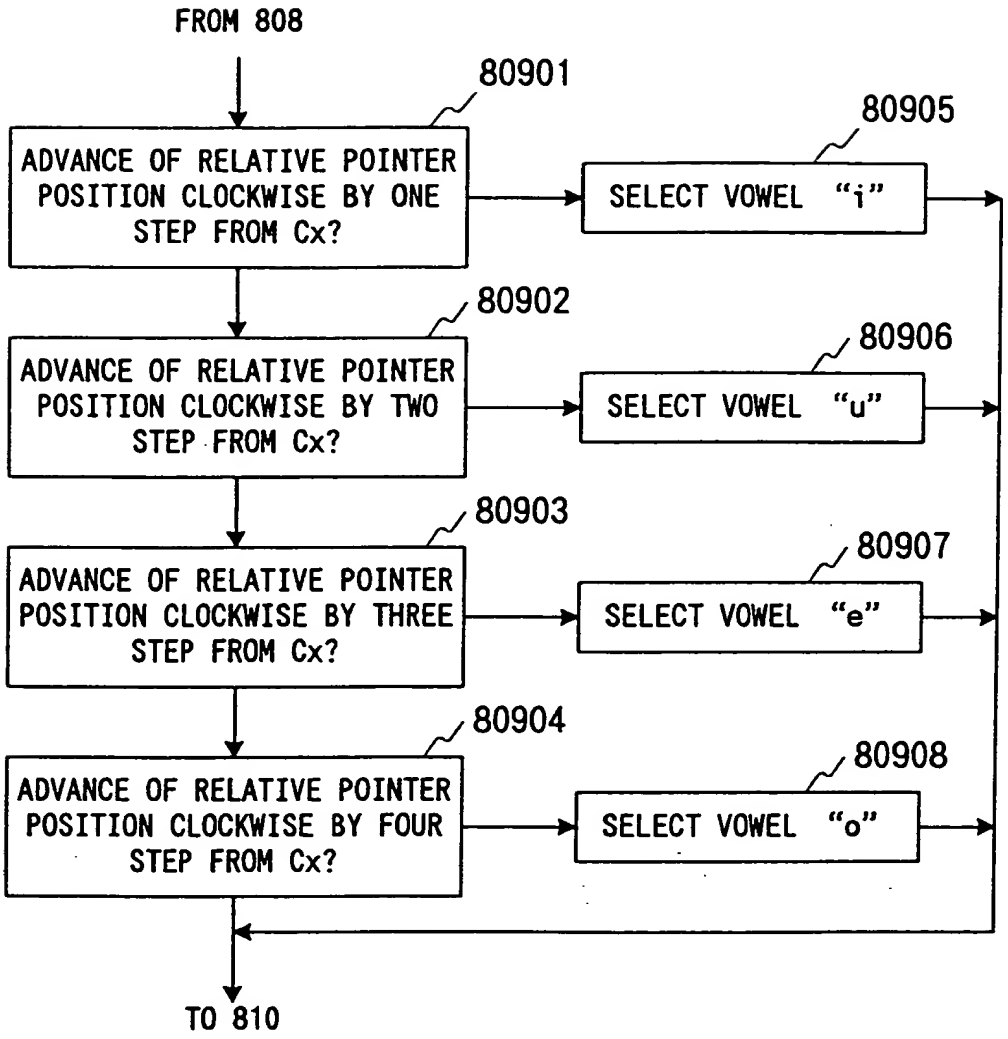

FROM 808
80901
ADVANCE OF RELATIVE POINTER POSITION CLOCKWISE BY ONE STEP FROM Cx?
80905
SELECT VOWEL "i"
80902
ADVANCE OF RELATIVE POINTER POSITION CLOCKWISE BY TWO STEP FROM Cx?
80906
SELECT VOWEL "u"
80903
ADVANCE OF RELATIVE POINTER POSITION CLOCKWISE BY THREE STEP FROM Cx?
80907
SELECT VOWEL "e"
80904
ADVANCE OF RELATIVE POINTER POSITION CLOCKWISE BY FOUR STEP FROM Cx?
80908
SELECT VOWEL "o"
TO 810

FIG.9

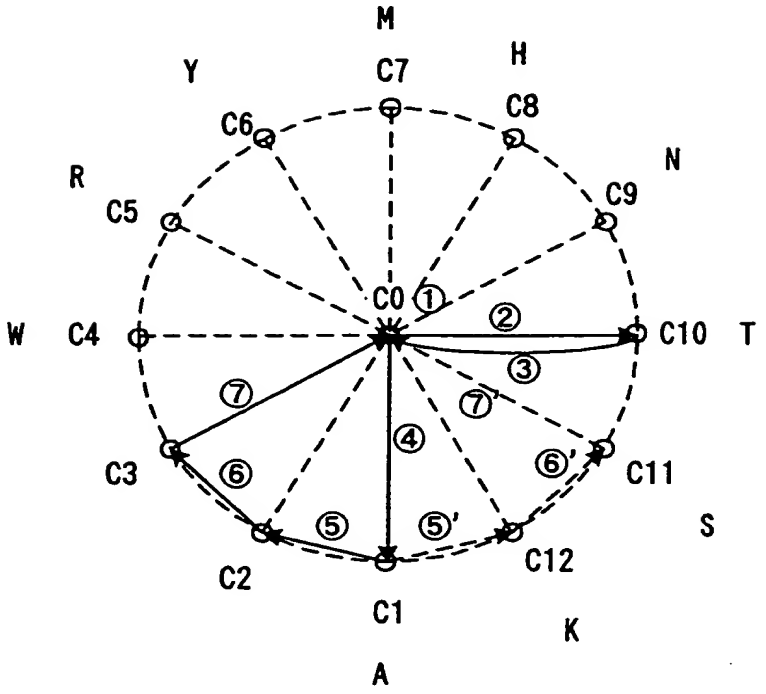

M
C7
H
C8
N
C9
T
C10
S
C11
K
C12
A
C1
C2
W
C4
C3
R
C5
C6
Y
C0
①
②
③
④
⑤
⑤'
⑥
⑥'
⑦
⑦'

FIG.10

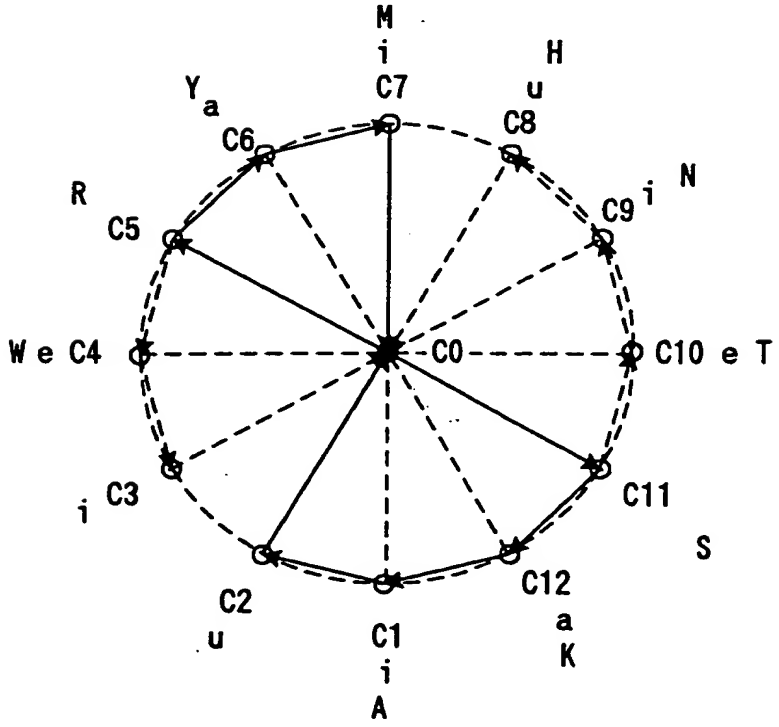

M
i
C7
H
u
C8
N
i
C9
T
C10 e
S
C11
K
a
C12
A
i
C1
C2
u
W e C4
i
C3
R
C5
Y a
C6
C0

FIG.11(a)

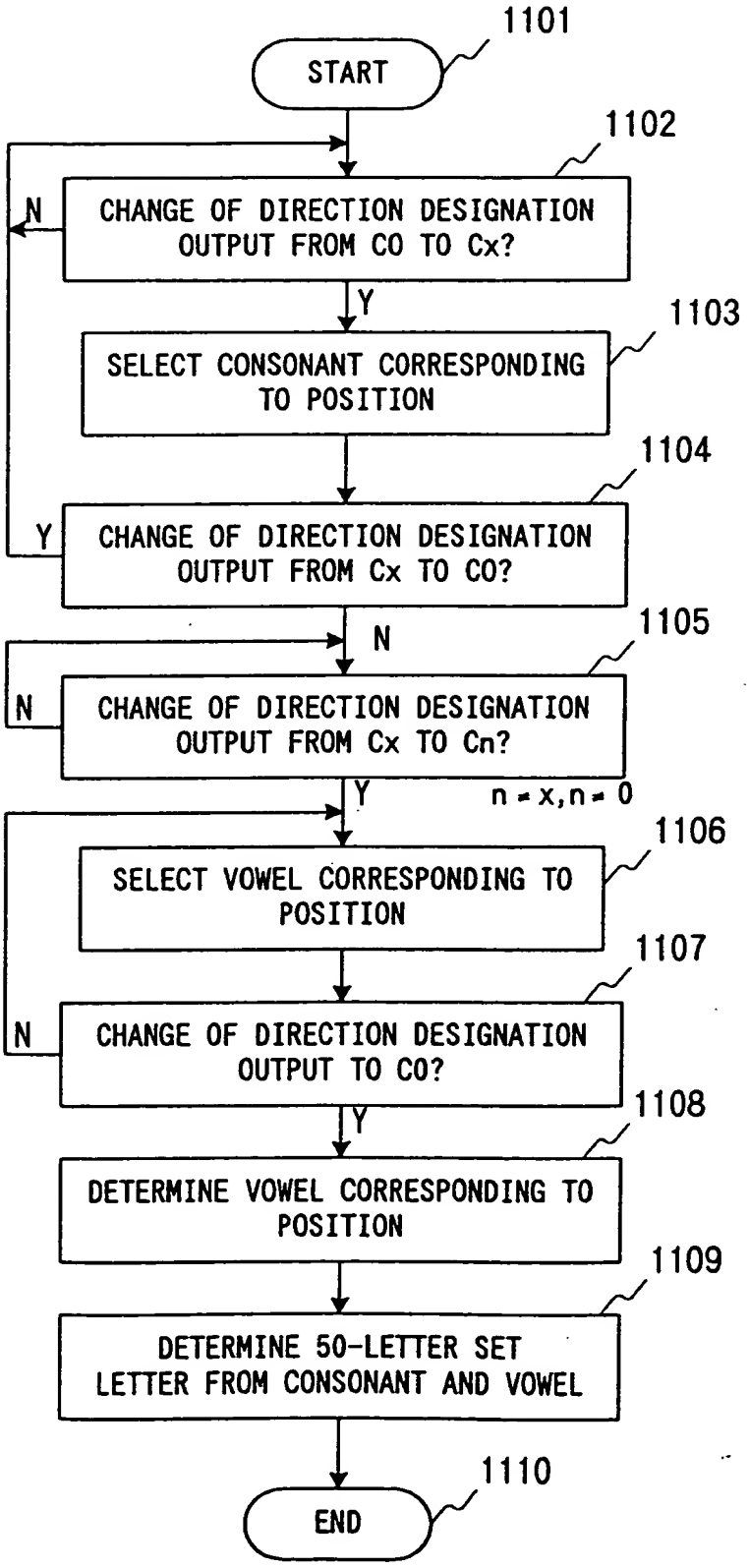

1101
START
1102
CHANGE OF DIRECTION DESIGNATION OUTPUT FROM CO TO Cx?
N
Y
1103
SELECT CONSONANT CORRESPONDING TO POSITION
1104
CHANGE OF DIRECTION DESIGNATION OUTPUT FROM Cx TO CO?
Y
N
1105
CHANGE OF DIRECTION DESIGNATION OUTPUT FROM Cx TO Cn?
N
Y
n = x, n = 0
1106
SELECT VOWEL CORRESPONDING TO POSITION
1107
CHANGE OF DIRECTION DESIGNATION OUTPUT TO CO?
N
Y
1108
DETERMINE VOWEL CORRESPONDING TO POSITION
1109
DETERMINE 50-LETTER SET LETTER FROM CONSONANT AND VOWEL
1110
END

FIG.11 (b)

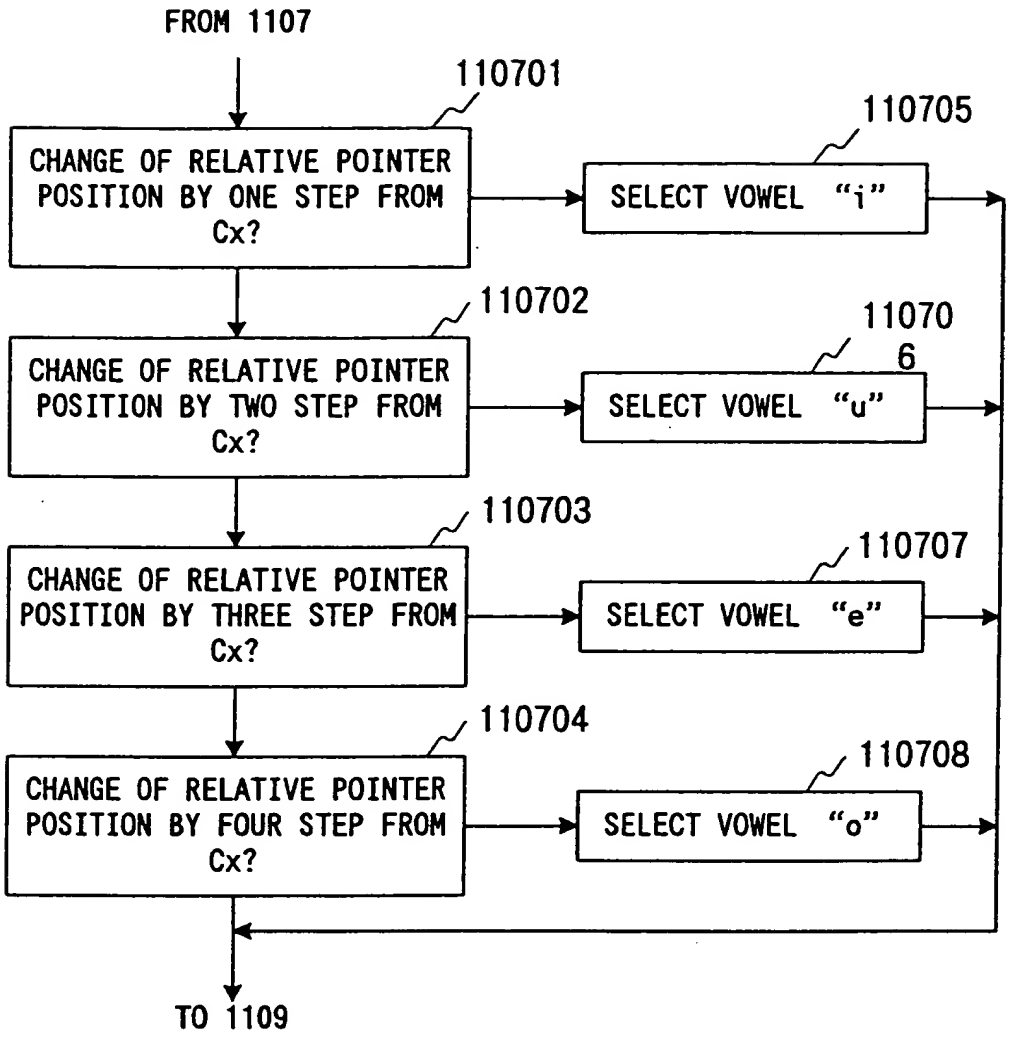

FROM 1107
110701
CHANGE OF RELATIVE POINTER POSITION BY ONE STEP FROM Cx?
110705
SELECT VOWEL "i"
110702
CHANGE OF RELATIVE POINTER POSITION BY TWO STEP FROM Cx?
11070 6
SELECT VOWEL "u"
110703
CHANGE OF RELATIVE POINTER POSITION BY THREE STEP FROM Cx?
110707
SELECT VOWEL "e"
110704
CHANGE OF RELATIVE POINTER POSITION BY FOUR STEP FROM Cx?
110708
SELECT VOWEL "o"
TO 1109

FIG.12

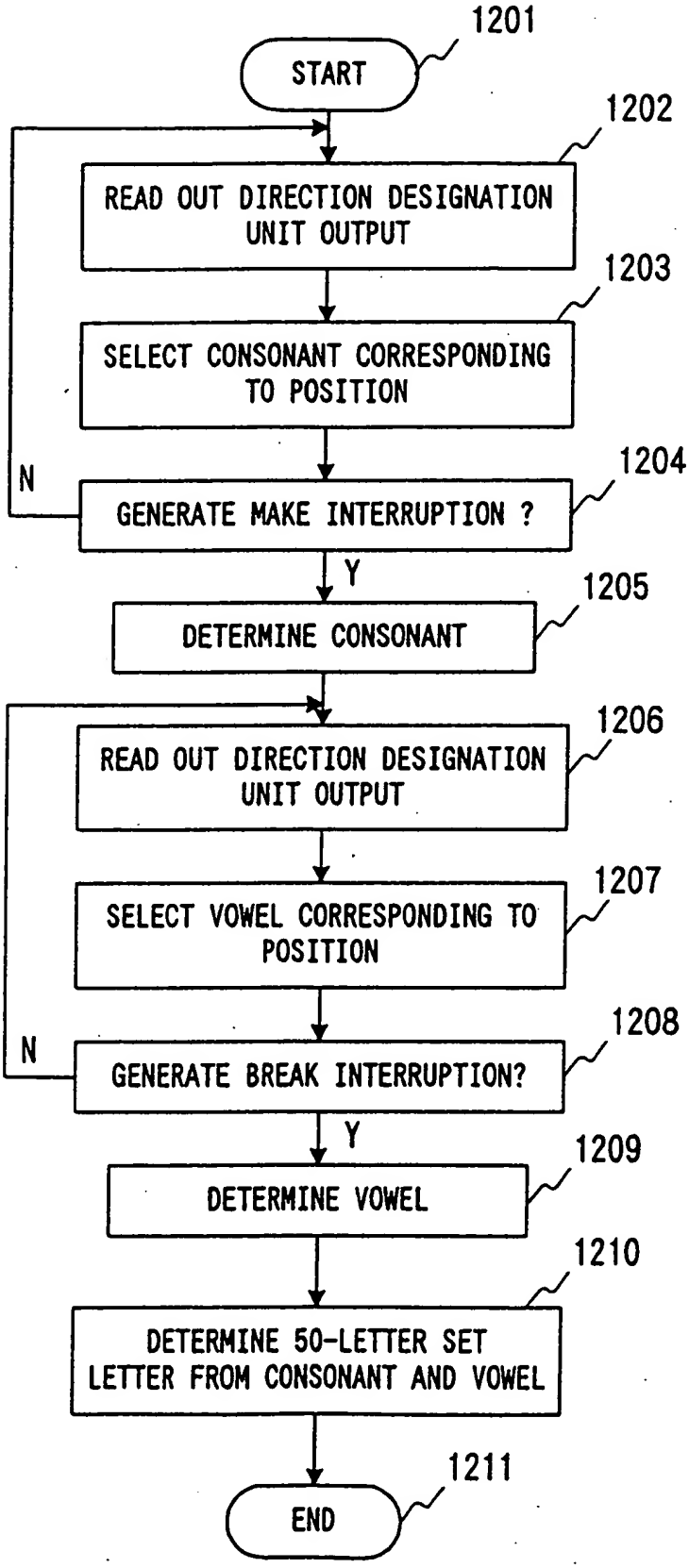
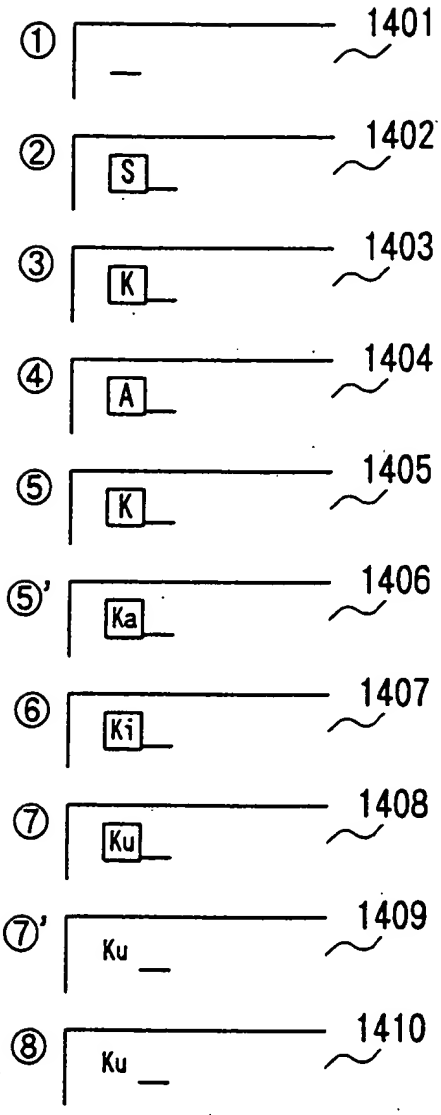

1201
START
1202
READ OUT DIRECTION DESIGNATION UNIT OUTPUT
1203
SELECT CONSONANT CORRESPONDING TO POSITION
1204
N
GENERATE MAKE INTERRUPTION ?
Y
1205
DETERMINE CONSONANT
1206
READ OUT DIRECTION DESIGNATION UNIT OUTPUT
1207
SELECT VOWEL CORRESPONDING TO POSITION
1208
N
GENERATE BREAK INTERRUPTION?
Y
1209
DETERMINE VOWEL
1210
DETERMINE 50-LETTER SET LETTER FROM CONSONANT AND VOWEL
1211
END

FIG.13

(a)



JAPANESE CHARACTER		ROMAN ALPHABET	
あ	=	a	1421
い	=	i	1422
う	=	u	1423
え	=	e	1424
お	=	o	1425
か	=	Ka	1426
さ	=	Sa	1427
た	=	Ta	1428
な	=	Na	1429
⋮		⋮	

(b)

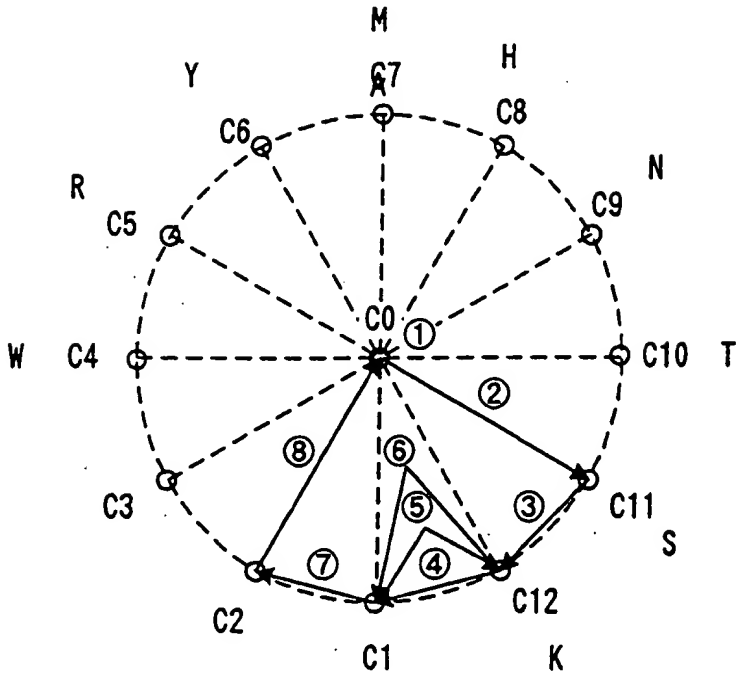
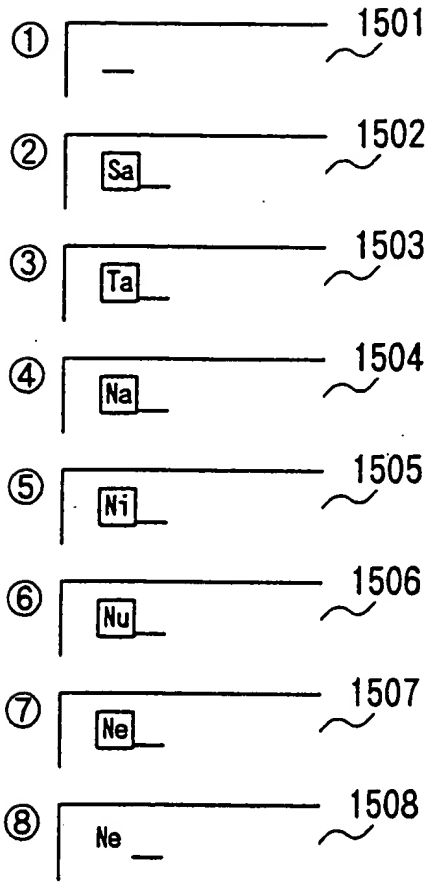


FIG.14

(a)


①
1501
—
②
1502
Sa
③
1503
Ta
④
1504
Na
⑤
1505
Ni
⑥
1506
Nu
⑦
1507
Ne
⑧
1508
Ne

(b)

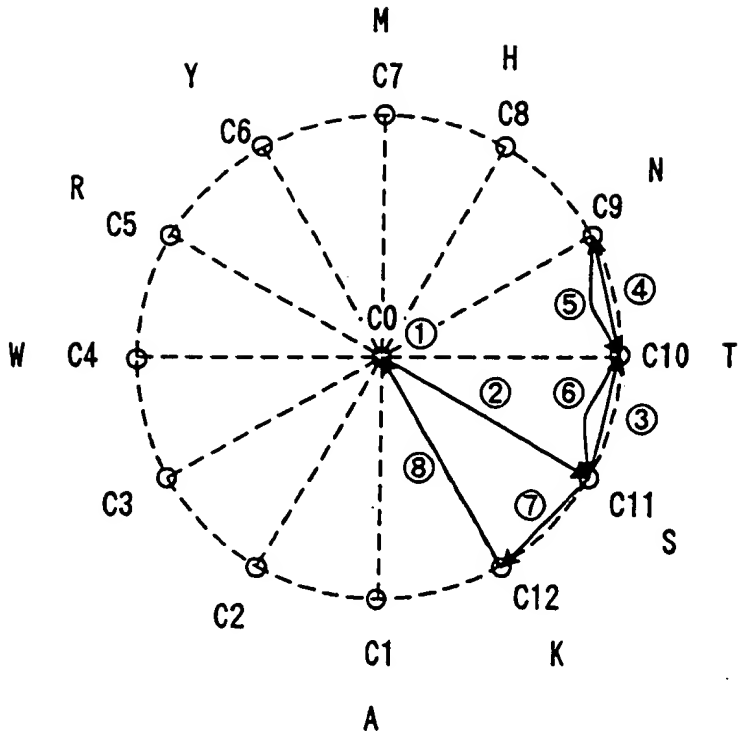

M
C7
H
C8
N
C9
T
C10
S
C11
K
C12
A
C1
C2
C3
W
C4
R
C5
Y
C6
C0
①
②
③
④
⑤
⑥
⑦
⑧

FIG.15

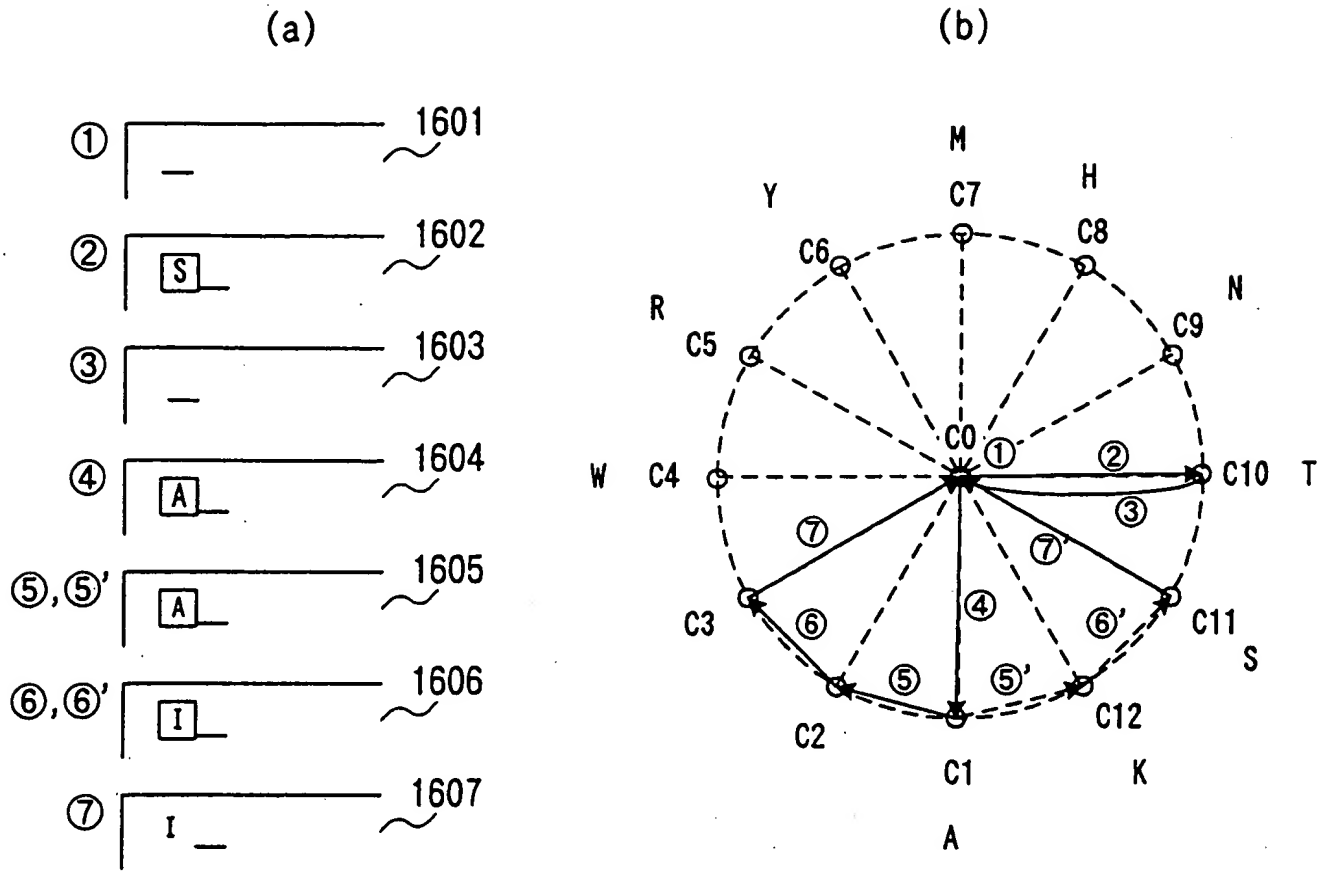

(a)
(b)
①
②
③
④
⑤,⑤'
⑥,⑥'
⑦
1601
1602
1603
1604
1605
1606
1607
S
A
A
I
I
M
H
N
T
S
K
A
W
R
Y
C0
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
C12

FIG.16

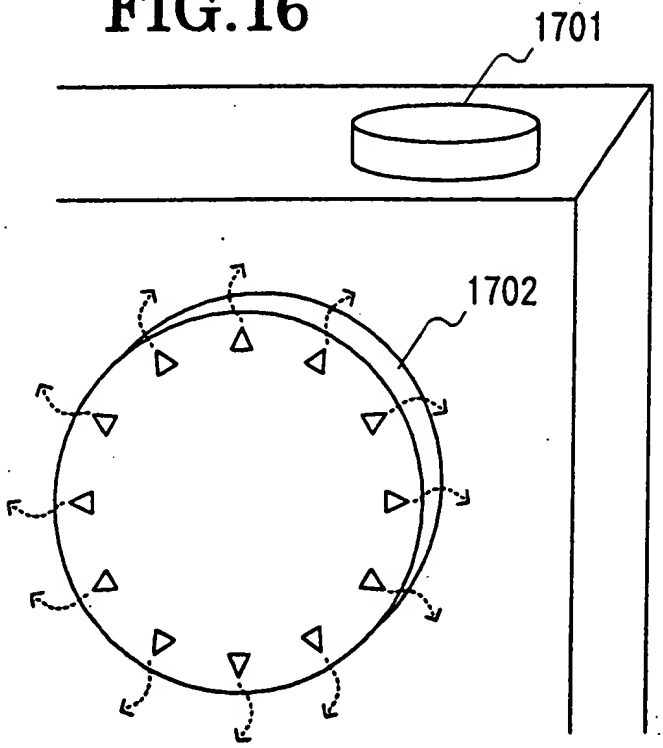

1701
1702

FIG.17

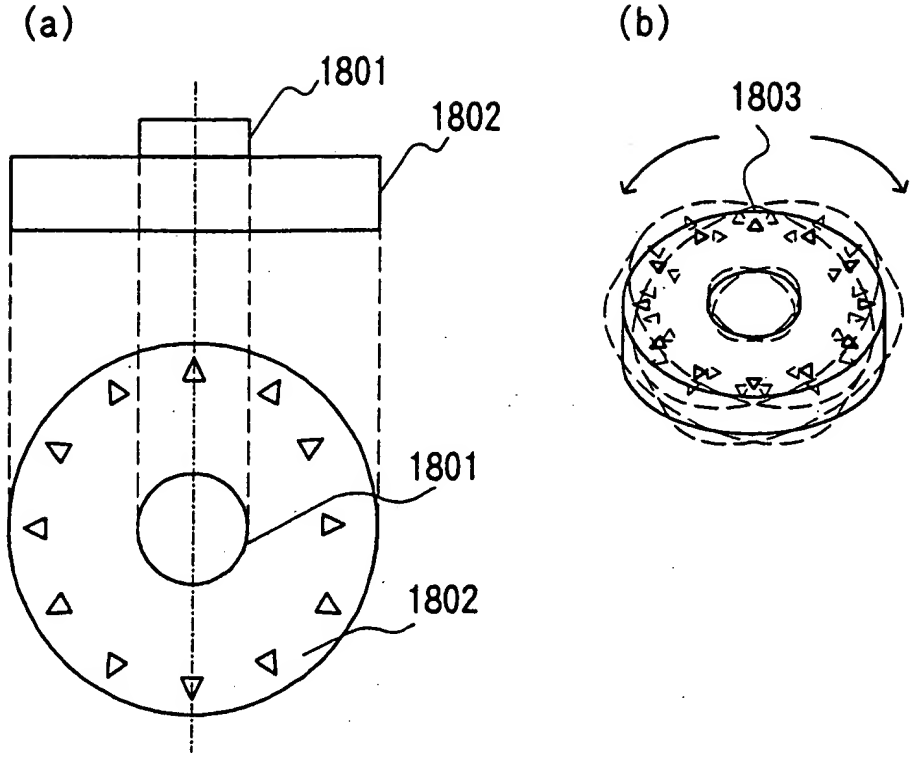


FIG.18

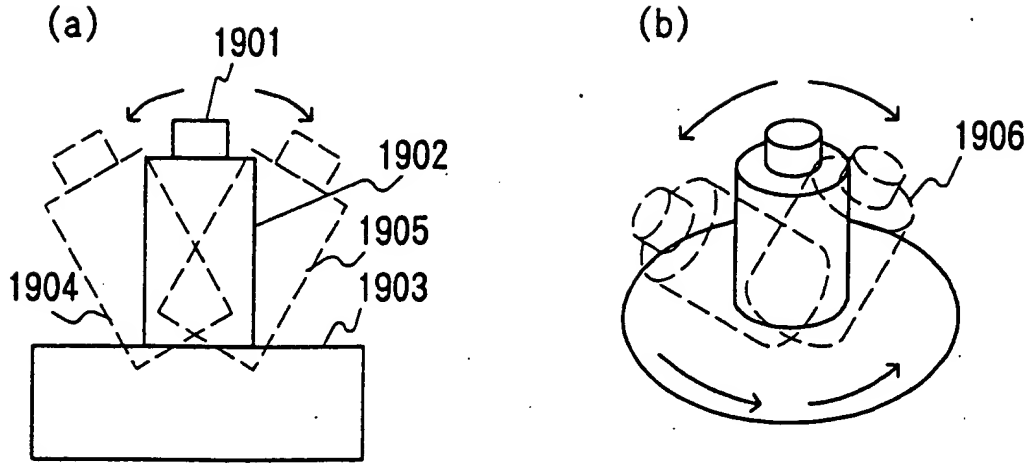
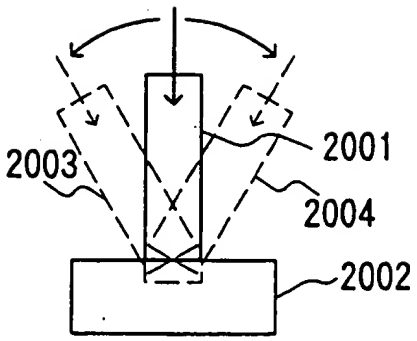
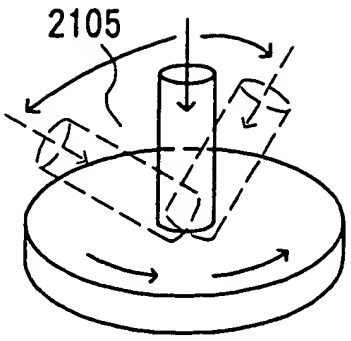


FIG.19

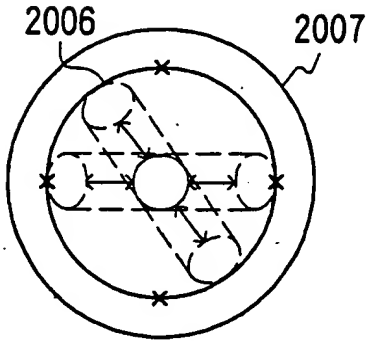
(a)



(b)



(c)



(d)

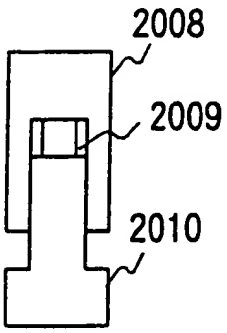


FIG.20

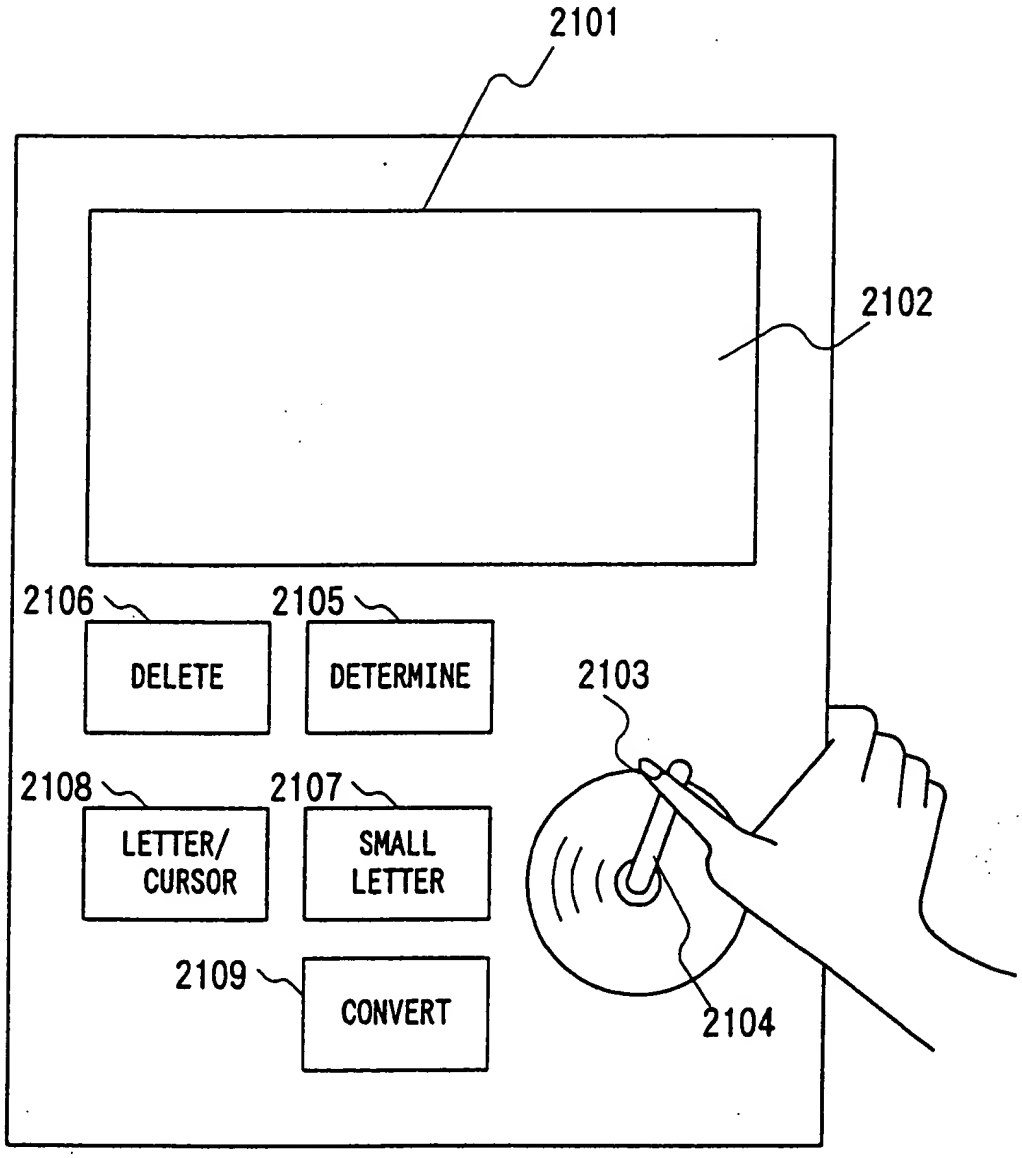

2101
2102
2106
DELETE
2105
DETERMINE
2103
2108
LETTER/
CURSOR
2107
SMALL
LETTER
2109
CONVERT
2104

FIG.21

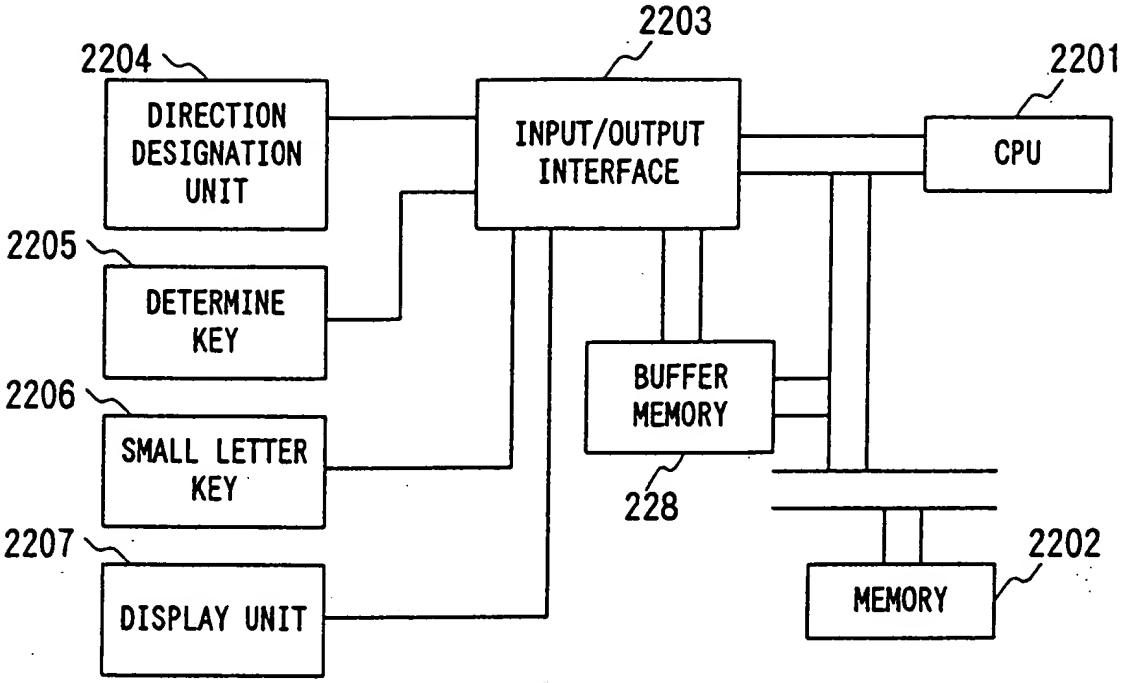

2203
2204
2201
DIRECTION DESIGNATION UNIT
INPUT/OUTPUT INTERFACE
CPU
2205
DETERMINE KEY
2206
BUFFER MEMORY
SMALL LETTER KEY
228
2207
2202
DISPLAY UNIT
MEMORY

FIG.22

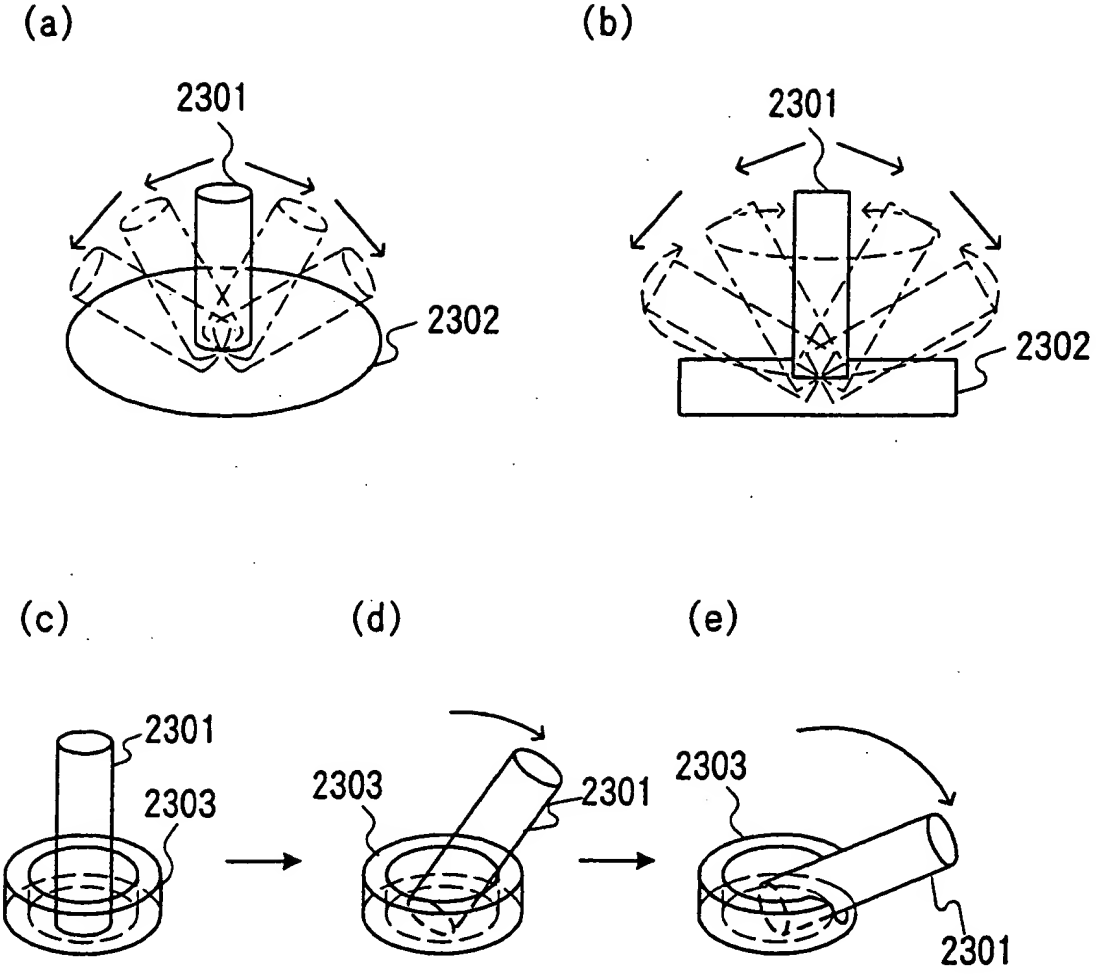


FIG.23

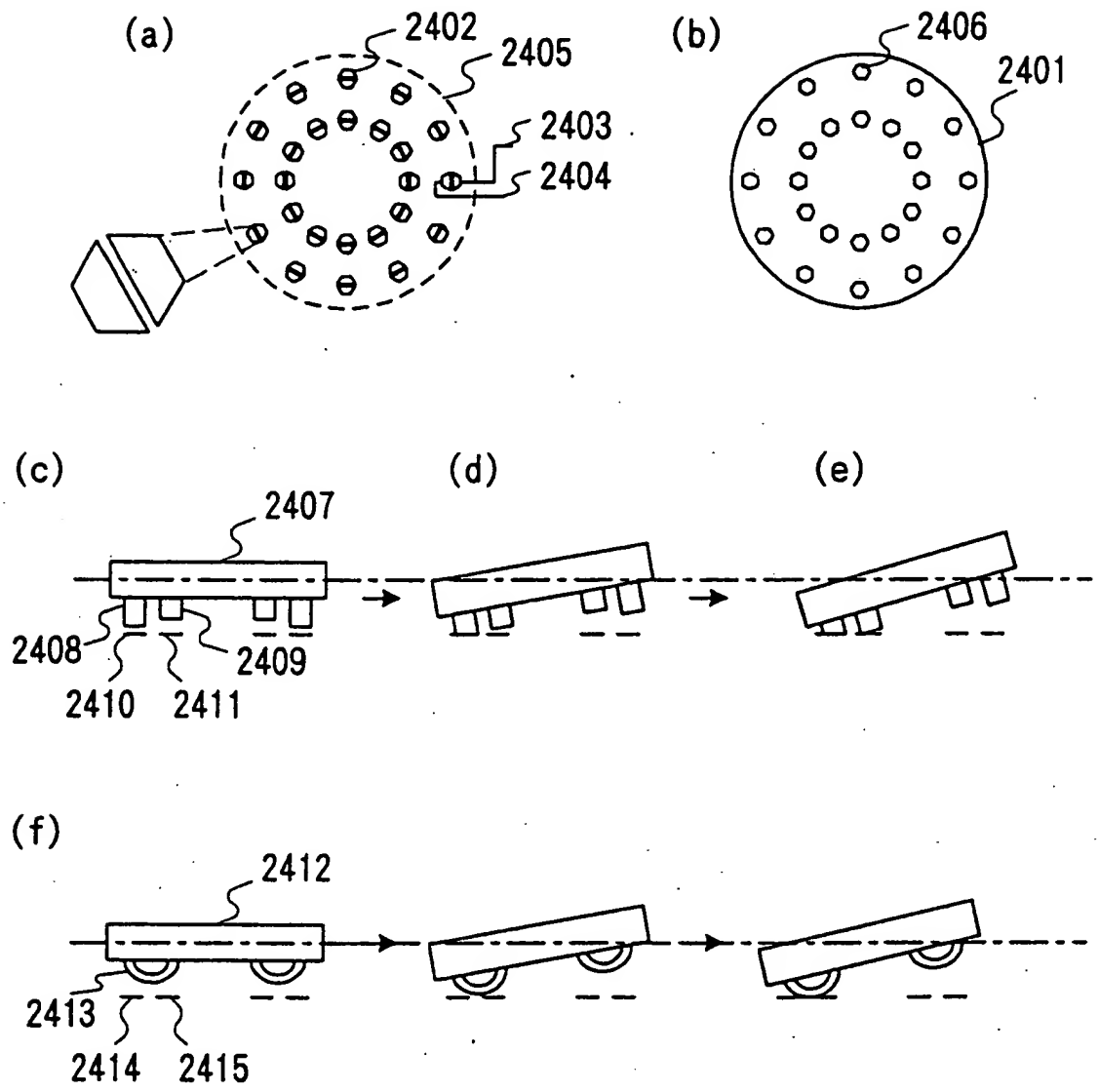

(a)
2402
2405
2403
2404
(b)
2406
2401
(c)
(d)
(e)
2407
2408
2409
2410
2411
(f)
2412
2413
2414
2415

FIG.24

(a)

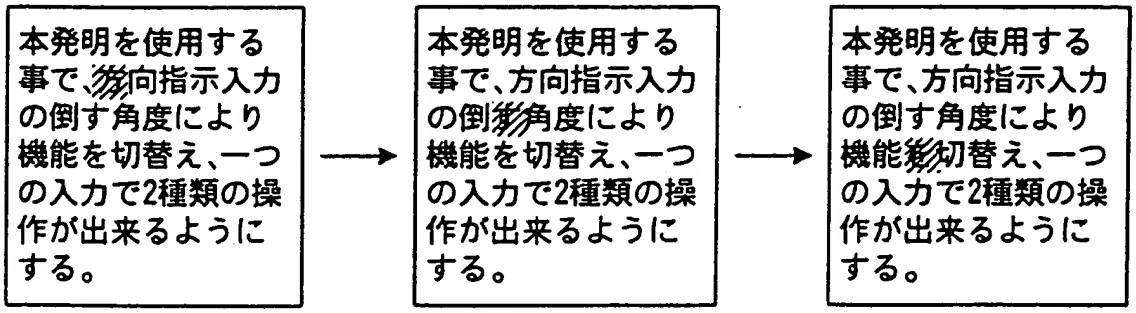
STATE	OUTPUT(BINARY)
C0-1	0000000000000
C1-1	0000000000001
C2-1	0000000000010
C3-1	0000000000100
C4-1	0000000001000
C5-1	0000000010000
C6-1	0000000100000
C7-1	0000001000000
C8-1	0000010000000
C9-1	0000100000000
C10-1	0001000000000
C11-1	0010000000000
C12-1	0100000000000
WITHOUT USE	1000000000000
C1-2	1000000000001
C2-2	1000000000010
C3-2	1000000000100
C4-2	1000000001000
C5-2	1000000010000
C6-2	1000000100000
C7-2	1000001000000
C8-2	1000010000000
C9-2	1000100000000
C10-2	1001000000000
C11-2	1010000000000
C12-2	1100000000000

(b)

STATE	OUTPUT (HEXADECIMAL)
C0-1	00h
C1-1	01h
C2-1	02h
C3-1	03h
C4-1	04h
C5-1	05h
C6-1	06h
C7-1	07h
C8-1	08h
C9-1	09h
C10-1	0Ah
C11-1	0Bh
C12-1	0Ch
C12-1	0Dh
WITHOUT USE	0Eh
WITHOUT USE	0Fh
WITHOUT USE	10h
C1-2	11h
C2-2	12h
C3-2	13h
C4-2	14h
C5-2	15h
C6-2	16h
C7-2	17h
C8-2	18h
C9-2	19h
C10-2	1Ah
C11-2	1Bh
C12-2	1Ch
WITHOUT USE	1Dh
WITHOUT USE	1Eh
WITHOUT USE	1Fh

FIG.25

(a)


本発明を使用する事で、方向指示入力の倒す角度により機能を切替え、一つの入力で2種類の操作が出来るようにする。
本発明を使用する事で、方向指示入力の倒す角度により機能を切替え、一つの入力で2種類の操作が出来るようにする。
本発明を使用する事で、方向指示入力の倒す角度により機能を切替え、一つの入力で2種類の操作が出来るようにする。

(b)

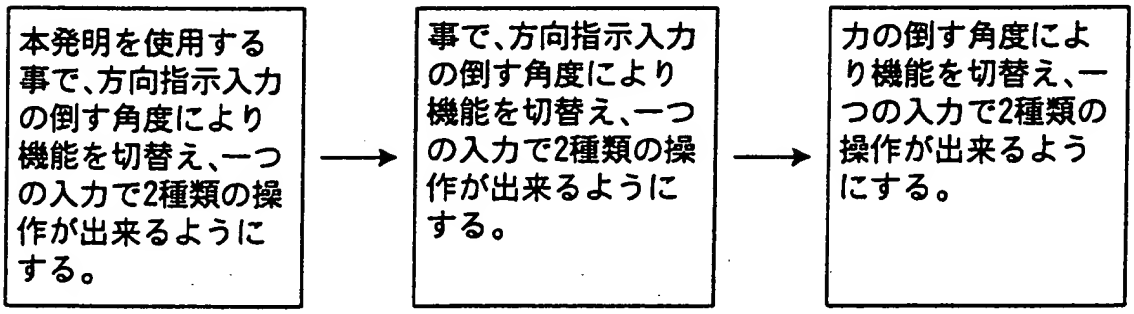
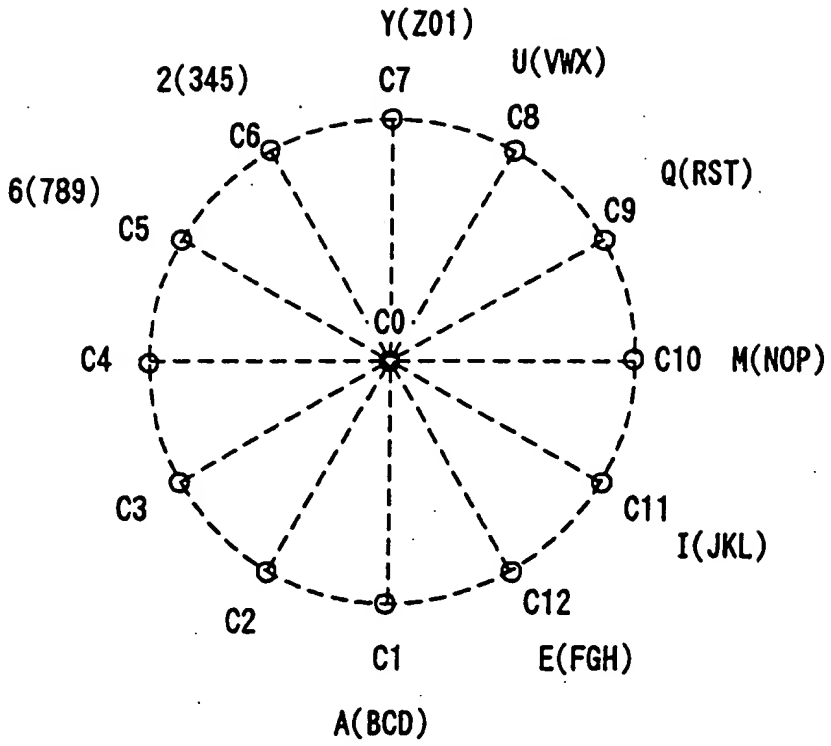

本発明を使用する事で、方向指示入力の倒す角度により機能を切替え、一つの入力で2種類の操作が出来るようにする。
事で、方向指示入力の倒す角度により機能を切替え、一つの入力で2種類の操作が出来るようにする。
力の倒す角度により機能を切替え、一つの入力で2種類の操作が出来るようにする。

FIG.26


Y(Z01)
U(VWX)
2(345)
C7
C8
C6
Q(RST)
6(789)
C9
C5
C0
C4
C10
M(NOP)
C3
C11
I(JKL)
C2
C12
C1
E(FGH)
A(BCD)